

**What is claimed is:**

1. A germicidal lamp for use in a purification system comprising:

an ultraviolet lamp having an exterior non-uniform surface contour,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

2. A germicidal lamp as in claim 1 wherein:  
the exterior non-uniform surface comprises grooves.

3. A germicidal lamp as in claim 1 wherein:  
the exterior non-uniform surface comprises a helix.

4. A germicidal lamp as in claim 1 wherein:  
the exterior non-uniform surface comprises a double  
helix

5. A germicidal lamp as in claim 1 wherein:  
said ultraviolet lamp comprises a fluorescent lamp.

6. A germicidal lamp for use in a purification system comprising:

a cylindrical ultraviolet lamp; and

an envelope having an exterior non-uniform surface contour enclosing said cylindrical ultraviolet lamp,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

7. A germicidal lamp as in claim 6 wherein:

the exterior non-uniform surface comprises grooves.

8. A germicidal lamp as in claim 6 wherein:

the exterior non-uniform surface comprises a helix.

9. A germicidal lamp as in claim 6 wherein:

the exterior non-uniform surface comprises a double helix.

10. A germicidal lamp as in claim 6 wherein:

said ultraviolet lamp comprises a fluorescent lamp.

11. A water purification system comprising:

a chamber for containing a fluid to be purified; and

an ultraviolet lamp comprising an exterior non-uniform surface contour placed within said chamber,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

12. A water purification system as in claim 11 wherein said ultraviolet lamp comprises:

a cylindrical lamp; and

an envelope placed over said cylindrical lamp, said envelope having the exterior non-uniform surface contour.

13. A water purification system as in claim 11 wherein:

the non-uniform surface contour comprises grooves.

14. A water purification system as in claim 11 wherein:

the non-uniform surface contour comprises a helix.

15. A water purification system as in claim 11 wherein:

said ultraviolet lamp comprises a fluorescent lamp.

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16. An air purification system comprising:  
a room having air therein; and  
a ultraviolet lamp having an exterior non-uniform  
surface contour placed within said room,  
whereby the exterior non-uniform surface contour is  
capable of creating turbulent flow in the air.

17. An air purification system as in claim 16 wherein  
said ultraviolet lamp comprises:

a cylindrical lamp; and  
an envelope placed over said cylindrical lamp, said  
envelope having the exterior non-uniform surface contour.

18. An air purification system as in claim 16 wherein:  
the non-uniform surface contour comprises grooves.

19. An air purification system as in claim 16 wherein:  
the non-uniform surface contour comprises a helix.

20. An air purification system as in claim 16 wherein:  
said ultraviolet lamp comprises a fluorescent lamp.

21. An air purification system as in claim 16 further comprising:

blower, said blower moving air over said ultraviolet lamp.

22. A method of purifying a fluid comprising the steps of:

providing fluid having a flow; and  
placing within the fluid flow an ultraviolet lamp comprising an exterior non-uniform surface contour,  
whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

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